

### REMARKS

Claims 1-23 are pending in this application. All claims have been rejected.

Claims 1-10, 20-21, and 23 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,498,982 B2 (Bellesfield) in view of "Spatial Data Mining (Krzysztof Koperski)". Claims 11, 15, and 22 have been rejected under 35 U.S.C. §103(a) as unpatentable over Bellesfield in view of U.S. Patent No. 6,192,164 B1 (Park). Claim 12 has been rejected under 35 U.S.C. §103(a) as unpatentable over Bellesfield in view of U.S. Patent No. 6,484,160 B1 (Richard). Claims 13 and 14 have been rejected under 35 U.S.C. §103(a) as unpatentable over Bellesfield as applied to Claim 12 in view of Richard and further in view of U.S. Patent No. 5,644,656 (Akra). Claim 16 has been rejected under 35 U.S.C. §103(a) as unpatentable over Bellesfield as applied to Claim 15 in view of Park and further in view of Akra. Claims 17-19 have been rejected under 35 U.S.C. §103(a) as unpatentable over Bellesfield in view of U.S. Patent No. 5,457,439 (Kuhn).

Bellesfield describes an automated travel planning apparatus that includes three separate databases, including a map database for storing bit-mapped images covering numerous geographic regions, a routing database for storing node, link, and shape data for roads geographically located within the geographic regions and for storing place data indicating the geographic location of places such as towns and cities, and a places of interest database containing the geographic locations of numerous places of interest.

The present invention teaches a technique for quickly calculating a useful distance or an orientation requested by users. The inventive technique derives distances or orientations by analysis of stored information, not through use of measurements, which are calculated in advance.

Contrary to the Examiner's citation of column 3, lines 53-63, Bellesfield does not teach or describe "providing **from said database** a starting point or a starting point group" recited in Claims 1, 6, 11, and 20-23. Instead, as stated in column 3, line 53-57, Bellesfield states:

"After a user selects, via the user interface 14, a departure point and a destination point, the routing component 46 employs the routing database 40 to generate a route between the selected departure and destination points."

In Bellesfield it is the user who provides the departure and destination points and it is the route between these points that is retrieved from a database.

Neither does Bellesfield teach nor describe:

“defining an **objective function** that is examined in order to introduce said spatial rules” recited in Claims 1, 6, 20-21, and 23;

“inputting of an **objective function** required for the optimization of a distance”, recited in Claims 12, 15, and 17; or

“designating an **upper limit** for a distance between a set of starting points and a set of query points”, recited in Claims 11 and 22.

The two sections of the Bellesfield specification referenced by the Examiner, specifically column 3, lines 53-63 and column 6, lines 52-59 discuss places of interest database 34, not defining an objective function as recited in Claims 1, 6, and 20-21.

The Examiner cited Bellesfield column 6, lines 20-24, as teaching the “calculating distance” from an orientation block” recitation of the inventive claims, this section states:

The "distance along link" is then found by calculating the distance between the point of intersection and one of the two end nodes of the link. The distance values are any geographic form of measurement such as miles, meters, etc.

However, as explained in the objects of the invention of the present application and described in Bellesfield with reference to Figure 5, the "distance along link" is an entry in a database. Contrarily, the inventive database, as recited in the preamble of Claims 1, 6, 20, and 21, includes the spatial rules and addresses to be used for calculations, not the actual distances. Moreover, the present invention strives to optimize the objective function by calculating

- 1) a distance from a starting point or a starting point group; or
- 2) an orientation block originating at said starting point or said starting point group

recited in Claims 1, 6, 11, 17, and 20-23; or a distance based on a generated intermediate table recited in Claims 12 and 15.

Finally, the Examiner references Park, which describes a digital scan converter in an ultrasonic system. Park stores a received ultrasonic signal and displays the ultrasonic signal via a display. Specifically, the Examiner cites column 4, line 65 to column 5, line 4, which states:

"Also, the DSP 62 calculates the angle between the sampling point A the pixel point S on the start scan line P and the angle between the sampling point B the pixel point S on the next scan line C, and then calculates the interpolation coefficient I represented by the ratio of the angle between the A and S and that between the B and S"

However, this does not teach calculating an angle formed between a starting point and a query point retrieved from a database as recited in Claims 11 and 22.

Krzysztof Koperski, Park, Richard, Akra, and Kuhn do not cure the deficiencies of Bellesfield and in any case were not relied upon by the Examiner to address elements discussed above. Therefore, it is concluded that Bellesfield, Krzysztof Koperski, Park, Richard, Akra, Kuhn, and any combination thereof do not teach or describe the elements of independent Claims 1, 6, 11, 12, 15, 17, and 20-23. Without conceding the patentability per se of dependent Claims 2-5, 7-10, 13-14, 16, and 18-19, these are likewise believed to be allowable by virtue of their dependence on their respective independent claims. Accordingly, reconsideration and withdrawal of the rejections of Claims 1-23 is respectfully requested.

Accordingly, all of the claims pending in the Application, namely, Claims 1-23, are believed to be in condition for allowance. Should the Examiner believe that a telephone conference or personal interview would facilitate resolution of any remaining matters, the Examiner may contact Applicants' attorney at the number given below.

Respectfully submitted,



Paul J. Farrell  
Reg. No. 33,494  
Attorney for Applicant

DILWORTH & BARRESE, LLP  
333 Earle Ovington Blvd.  
Uniondale, New York 11553  
Tel: (516) 228-8484